DESCRIPTION

The Schult S-6 proposed pursuit airplane is designed for maximum performance.

This machine is a full cantilever FLYING WING monoplane with a fully retractable tricycle landing gear. There are no flaps for low landing speed since the wing loading is not more than 18.8 lbs / sq. ft. There are only two control surfaces in this wing. These are located in the trailing edge of the wing near each tip. Each control surface is actuated about the transverse axis to elevate or depress the airplane. Turning about the vertical axis is accomplished by producing a drag on either wing tip by the use of a split aileron. Roll about the fore + aft axis is accomplished by the use of the differential aileron in the conventional way.

Powered with an Allison motor driving two propellers acting on the same & rotating in opposite directions eliminates torque. Since the propellers are in the rear and the motor in the middle the nose of the nacelle can be made perfectly smooth hence reducing this drag to a minimum.

In this report I have made a comparison with a True flying wing Case I. Although this Case is fictitious in a small size airplane, it gives one the ideal picture for a large bomber using 4 motors. In regard to a large bomber, the motors, bombs, crew, fuel and oil etc would all be inside the wing thus eliminating drag to a minimum. Since the tail is entirely eliminated the rear gunner has nothing to interfer with operation of this gun. Hence this machine is completely protected from

all sides by guns a feature which no other airplane has to-day.

I have built a 1/20 scale model of Case I airplane with a slight change in the wing curve.

The model is hand launched by the use of a rubber band simulating the catapulting of a full sized airplane. To-date I have made numerous flights with this model and have found it to be stable fore and aft and capable of maintaining a good glide at all times.